The opinion in support of the decision being entered today was $\underline{\text{not}}$ written for publication and is $\underline{\text{not}}$ binding precedent of the Board.

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Ex parte RANDALL J. THIESSEN

Appeal No. 2006-0601
Application No. 10/430,030

ON BRIEF

Before GARRIS, WALTZ and FRANKLIN, <u>Administrative Patent Judges</u>.

GARRIS, <u>Administrative Patent Judge</u>.

DECISION ON APPEAL

This is a decision on an appeal which involves claim 1.

The subject matter on appeal relates to an apparatus for converting dirty fuels to steam and useful gas. With reference to the appellant's drawing, the apparatus 10 comprises a combustor 16, a steam boiler 14 and a gasifier 26. Further details of this appealed subject matter are set forth in the sole claim on appeal which reads as follows:

- 1. An apparatus for converting dirty fuels to steam and useful gas, the apparatus comprising:
- a combustor burning dirty fuels producing heat and exhaust;
- a steam boiler receiving the heat from the combustor to produce steam; and

a gasifier wherein biomass material and the exhaust from the combustor result in useful gas.

The references set forth below are relied upon by the examiner in the Section 102 rejections before us:

 Sacks
 3,966,634
 Jun. 29, 1976

 Horgan
 4,478,039
 Oct. 23, 1984

Claim 1 is rejected under 35 U.S.C. § 102(b) as being anticipated by either Horgan or Sacks.

Rather than reiterate the respective positions advocated by the appellant and by the examiner, we refer to the brief and reply brief and to the answer for a complete exposition thereof.

OPINION

For the reasons which follow, we will sustain each of these rejections.

It is the appellant's basic position that neither the Horgan apparatus nor the Sacks apparatus provides the gasifier with exhaust from the combustor as required by the appealed claim.

More specifically, the appellant argues that conduit 48 of Horgan is disclosed as transferring heat, but not exhaust, from

fluidized bed combustor 20 to gasifier 22. Similarly, the appellant argues that Sacks discloses transferring heat via heat-transfer particles, but not exhaust, from combustor 11 to gasifier 12.

It is true that neither of the applied references expressly discloses transferring exhaust from the combustor to the gasifier. However, the absence of express disclosure does not forestall a finding of anticipation. This is because a reference will still anticipate if the disclosure of the claim limitation in question is inherent (as opposed to explicit). See In re Schreiber, 128 F.3d 1473, 1478, 44 USPQ2d 1429, 1432 (Fed. Cir. 1997). Also see W.L. Gore & Assocs. v. Garlock, Inc., 721 F.2d 1540, 1548, 220 USPQ 303, 309 (Fed. Cir. 1983), (cert. denied), 469 U.S. 851 (1984)); In re In re Yanush, 477 F.2d 958, 959, 177 USPQ 705, 706 (CCPA 1973); In re Glass, 474 F.2d 1015, 1019, 176 USPQ 529, 532 (CCPA 1973).

In our view, the Horgan apparatus and the Sacks apparatus would inherently and necessarily transfer at least some exhaust from the combustor to the gasifier at least at some point during operation thereof. With regard to this matter, Horgan unambiguously teaches that "heat in the high temperature gas [of combustor 20] is transferred via the conduit 48 to the partial

gasifier 22" (column 5, lines 18-19). We do not perceive and the appellant does not explain how conduit 48 would be capable of transferring heat without also necessarily transferring at least some exhaust from the combustor to the gasifier. Analogously, Sacks unambiguously discloses transferring solid heat-transferring particles from combustion zone 11 to gasification zone 12 (e.g., see the paragraph bridging columns 1 and 2), and there is no perceptible way such transfer could take place without also necessarily transferring some exhaust along with the heat-transfer particles.

It is, of course, technically possible to transfer heat from one piece of equipment to another without also transferring gas, such as via an indirect heat transfer technique.

Significantly, such indirect heat transfer techniques are disclosed by both Horgan (e.g., see waste heat boiler 30 disposed within fluidized bed combustor 20) and Sacks (e.g., see patentee's indirect heat exchange techniques using pebbles in figures 1, 3 and 4). It is appropriate to emphasize that the disclosure of heat transfer from combustor to gasifier in both Horgan and Sacks is not associated with the indirect heat transfer disclosures of these references.

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This fact reinforces our above discussed determination that Horgan's and Sack's heat transfer from combustor to gasifier occurs by direct communication therebetween and accordingly would necessarily be accompanied by transfer of exhaust from combuster to gasifier.

Under these circumstances, we find that both Horgan and Sacks inherently transfer exhaust along with heat from the combustor to the gasifier of their respective apparatus. We hereby sustain, therefore, the examiner's Section 102(b) rejections of claim 1 as being anticipated by either Horgan or Sacks.

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The decision of the examiner is affirmed.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 CFR \$ 1.136(a).

<u>AFFIRMED</u>

BRADLEY R. GARRIS Administrative Patent	Judge)))	
THOMAS A. WALTZ Administrative Patent	Judge)))))	BOARD OF PATENT APPEALS AND INTERFERENCES
BEVERLY A. FRANKLIN Administrative Patent	Judge)))	

BRG:hh

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